

Pyramidella cinctella, Sowerby, Reeve, Coneh., pl. 6, sp. 45.

Hab. Darnley Island, Torres Straits, 30 fathoms, sandy mud.

59.—SYRNOLA PULCHRA, N. SP.

Shell acutely elongated, rather thin, smooth, whitish, whorls 11, flat, the last convex, suture deep, spirally encircled with a light yellowish brown narrow band just above the suture, last whorl with obsolete band of the same colour entering spirally into the interior; aperture ovate, peristome thin, columella plait rather prominent and twisted outwardly, interior of aperture furnished halfway down with 4 white prominent lines of striæ, the upper one thickest.

Length 3 lines, breadth $\frac{1}{2}$ line.

Hab. Darnley Island, Torres Straits, 30 fathoms, sandy mud; Cape York, North Australia, 11 fathoms, white sand.

Specimens from Cape York have only one band.

The ICHTHYOLOGY of the Chevert Expedition, by HAYNES GIBBES ALLEYNE, M.D., and WILLIAM MACLEAY, F.L.S.

During the voyage of the Chevert to New Guinea, no opportunity was lost by those on board of securing specimens of the fishes of the seas passed through. The result has been a collection of a most varied and interesting character, exceeding in point of number the collections made in those seas on any previous occasion.

It is our intention in this and succeeding Papers to give a list of these Fishes, with notes on their habits, localities, &c. The new species will be described and illustrated, and where previous descriptions have been imperfect, re-descriptions will be given of those previously named.

The labour attached to the task we have assigned ourselves is greater than will be generally believed, involving, as it does, the repeated examination of over a thousand fishes of all sizes, packed, some in bottles and some in large tanks, and with not a few very

much injured and rendered difficult of recognition by the knocking about which they got on board ship when in insufficiently filled tanks.

The collection has been made exclusively on the Australian coast in the inner passage from Percy Island to Cape York, in New Guinea at Katow and Hall Sound, and in Torres Straits from Warrior Island on the West to Darnley Island on the East.

We adopt the divisions and arrangement given by Gunther in his celebrated Catalogue of the Fishes of the British Museum.

ORDER 1.—ACANTHOPTERYGII.

FAMILY PERCIDÆ.

New Genus—PSEUDOLATES.

Seven branchiostegals. No pseudobranchiæ. Very fine villiform teeth on the jaws, vomer, palatine bones, and tongue. Two dorsals, the first with seven spines. The anal fin with three spines. Operculum with one spine. Præoperculum with strong spines at the angle and lower limb. Præorbital finely serrated. Scales large.

1.—PSEUDOLATES CAVIFRONS.

Plate III.

D. $7\frac{1}{11}$, A. $\frac{3}{8}$.

Body rather compressed. Height four and a third times in the total length. Head, nearly three and a half in the same. Teeth, minute, uniform, feeling like fine sandpaper. Profile of head concave. Upper maxillary large, extending beyond the vertical from the posterior portion of the eye. Lower jaw longer than the upper. Distance between the eyes about equal to the diameter of the orbit. Præoperculum finely serrated on the posterior edge, with a strong spine at the angle, and three smaller spines on the lower limb. A flat acute spine on the upper part of the operculum. Coracoid with seven denticulations, the upper one indistinct. Pectoral fins small. Ventrals with a very strong spine. The third spine of first dorsal very strong, and more than half the height of the body. Soft dorsal scaly at the base. Anal with the third spine much the longest, and the soft portion received into a scaly sheath. Caudal fin rounded. Colour shining, brown on the back, pale beneath. Scales on the body very large and finely serrated.

One specimen of this fish was caught somewhere in Torres Straits or the coast of New Guinea, the exact locality is not known. It is two feet long, and nearly six inches deep. Its affinity to *Lates* is very marked; in fact, but for the rough tongue and large scales, we would have taken it for *Lates nobilis* of Cuv. and Val. 2, p. 96, pl. 13.

2.—SERRANUS GILBERTI.

Rich. Ann. Nat. Hist., 1842, p. 19.

Serranus megachir, Rich. Ich. Chin. p. 230.

„ *pardalis*, Blecker, Perc., p. 37.

It is by no means easy to identify the species of this genus. They are numerous, they much resemble one another, and they have never, as we think, been very accurately described. The present species, more remarkable for the size of its pectoral fins than anything else, seems to have been found pretty generally from the latitude of Trinity Bay to Cape York.

3.—SERRANUS HEXAGONATUS.

Serranus hexagonatus, Cuv. and Val. 2, p. 330, and 6, p. 516; Guer. Icon. Poiss., pl. 4, f. 1; Rich. Voy. Sulph., p. 82, pl. 38, f. 1, &c., &c.

This species has a multiplicity of synonyms which we have curtailed very much as being unnecessary for reference. Gunther in his Catalogue makes out the species *foveatus* (Cuv. and Val.), *Merra* (Cuv. and Val.), and *stellans* (Rich.), to be synonymous with this, but doubts have been expressed as to the correctness of merging all these names in one.

We find that the references to Cuvier and Valenciennes Fishes, given by Gunther in his Catalogue, are quite different as to pages from the edition in our possession. We have, however, adhered to the references given by Gunther, as not improbably he may have taken them from an edition more generally in use than ours.

One specimen was taken at the Palm Islands.

4.—*SERRANUS CRAPAO*.

Cuv. and Val. 3, p. 494; Rich. Ann. Nat. Hist., 1842, p. 25.

This species was found in great abundance about the reefs of Long Island in Torres Straits.

5.—*SERRANUS AUSTRALIS*.

Casteln, Recherches on Aust. Fishes, p. 7.

One specimen was taken at Darnley Island.

6.—*SERRANUS FUSCUGUTTATUS*.

Rüpp. Atl. Fisch., p. 108, t. 27, f. 2, Peters, Wiegmann Archiv. 1855, p. 235.

The only specimen in the collection of this fine species is from Cape Grenville.

7.—*SERRANUS ALATUS*.

Plate IV., fig. 2.

D. $\frac{11}{6}$, A. $\frac{3}{8}$.

Head, more than a third of the total length. Diameter of the eye, one-fifth of the length of the head, and about equal to the space between the eyes, A small deep hollow between the eyes. Upper maxillary extending far beyond the vertical from the posterior part of the orbit. Præoperculum finely denticulated on the posterior limb, with a slight emargination above the angle. Operculum with the middle spine flat and acute, the upper invisible, and the lower small and acute. Caudal fin rounded. Pectoral very large, and extending to the vertical from the third anal spine. The head, back, and sides are closely covered with large brown, hexagonal spots, separated only by white lines, the spots becoming less crowded and distinct upon the under surface. On the dorsal fin the spots are large and divided by two longitudinal yellowish bands. The caudal fin is yellow, spotted with brown. The pectoral and anal fins are of a dark brown, with small spots of yellow. The head beneath and thorax are whitish, with broad brown bands.

One specimen, 12 inches long, of this handsome *Serranus* was captured at Hall Sound, New Guinea.

8.—*SERRANUS CARINATUS*.

Plate IV. Fig. 3.

D. $\frac{11}{17}$, A. $\frac{3}{8}$.

Oblong. Height of body less than one-fourth of the total length. Head, one-third of the same. Eye, four and a half times in the length of the head, and larger than the space between the eyes. Teeth fine. Intermaxillary very thin. Upper maxillary scarcely reaching to the vertical from the middle of the eye. Præoperculum irregularly denticulated, with a slight emargination above the angle. Operculum with the spines acute. A prominent curved ridge on the suboperculum near the angle of the præoperculum. Caudal fin rounded. Pectoral fins reaching to the extremity of the ventrals. Coloration in spirits pale, with large rounded or hexagonal brown spots, which are continued of about the same size on the dorsal fin, and of a less size on the caudal. The other fins are also spotted, but more indistinctly.

Two of this fish, eight inches long, were caught at Cape Grenville. It seems to resemble a good deal *Serranus Howlandi*, Gunth., Journ. Mus. Godeff. 3, p. 8, t. 9, f. B. There are other *Serrani* in the collection which we have been unable satisfactorily to determine, either from the specimens being injured or immature.

9.—*PLECTROPOMA MACULATUM*.

Cuv. and Val. 2, p. 393, ; Bleek. Jav., p. 39, &c.

Bodianus maculatus, Bloch, t. 288, Lacep. 4, pp. 280-293.*Plectropoma punctatum*, Quoy and Gaim., Voy. Freyc, Zool. Poiss., p. 318, t. 45, f. 1.,, *areolatum*, Rüpp. Atl., pp. 110-143.

The only specimen was caught at Fair Cape.

10.—*GENYORGE SEBÆ*.*Diacope Sebæ*, Cuv. and Val. 2, p. 310.,, *Siamensis*, Cuv. and Val. 6, p. 524.*Mesoprion Sebæ*, Bleek. Perc. p. 45.

Several large specimens of this fish were caught at the Percy Islands. The violet cross bands are scarcely traceable in the spirit specimens, and the general color is a faded yellow, but the fish when fresh caught is of a brilliant golden red.

11.—GENYOROGÉ UNICOLOR.

Plate IV. Fig. 1.

D. $\frac{11}{13-14}$, A. $\frac{3}{8-9}$.

Length of head equal to the height of the body, and nearly one-fourth of the total length. Diameter of orbit one fourth of the length of the head. Præoperculum finely serrated, with the notch small. Subopercular ridge bluntly acuminate. Soft dorsal and anal fins, not elevated behind, and somewhat rounded. Caudals forked. Colour, uniform pale red.

Two specimens were taken at the Percy Islands of about twelve inches in length. The shape of the soft dorsal and anal fins constitutes a very marked difference between this and the preceding species.

12.—MESOPRION WAIGIENSIS.

Diacope Waigiensis, Quoy and Gaim., Voy. Freyc., Zool., p. 307.

„ *immaculata*, Cuv. and Val. 2, p. 430.

One specimen from Cape Grenville.

13.—AMBASSIS PAPUENSIS.

Plate V. Fig. 4.

D. $7\frac{1}{9}$, A. $\frac{3}{9}$, P. 13.

The height of the body is one-third of the length without the caudal fin. Diameter of orbit nearly half the length of the head. Second dorsal spine almost as long as the head. Third spine of anal fin longest. Operculum unarmed. Infraorbital and double edge of præoperculum strongly denticulated, the teeth pointing backwards. Lateral line interrupted where it enters the median line. Colour, reddish yellow, with a silvery band on the median line and minute black dots along the black. A little black on the spinous dorsal and

caudal fins. The latter is moderately forked. The procumbent spine in front of the dorsal fin is not visible.

This species was seen in dense shoals close to the southern shore of Hall Sound. Specimens were obtained by firing a charge of small shot into the thick of them. The wounded immediately came to the surface, and a few of the least injured were selected as specimens.

14.—APOGON FASCIATUS (*White*).

Mullus fasciatus, White, N. S. Wales, p. 268, f. 1.

Apogon novem fasciatus, Cuv. and Val. 2, p. 154, Bleek, Timor, 1 p. 163; Peters, Wieg. Arch., 1855, p. 234.

„ *fasciatus*, Quoy and Gaim. Voy. Freyc, 2 vol., p. 344.

„ *Balinensis*, Bleek. Perc., p. 28, &c.

„ *Arubiensis*, Hombr. and Jacquin, Voy. au Pole Sud., Poiss., p. 31, pl. 1, f. 1.

Apogon eudeka-tænia, Bleek, Banka, p. 449.

The specimens in the collection of this widely distributed species are from Cape Grenville and Darnley Island. They differ considerably, and it is not improbable that the Darnley Island fish may prove to be distinct.

15.—APOGON GUTTULATUS.

Plate V. Fig. 1.

D. $7\frac{1}{8}$, A. $\frac{2}{5}$.

Height three and a half times in the total length. The third dorsal spine is the longest. Body silvery and speckled all over with minute black dots, with three longitudinal dark bands on each side—one from the top of the head to the termination of the soft dorsal fin; another, the largest, from the muzzle through the eye to the tail, the third from the suboperculum to the tail, marking the limits of a very silvery belly. The fins are whitish and very minutely speckled.

This fish was very numerous at Darnley Island, in holes in the rocks at low water. The average length is scarcely over an inch.

16. APOGONICHTHYS DARNLEYENSIS.

*Plate V. Fig. 3.*D. $7\frac{1}{8}$, A. $\frac{2}{7}$, L. lat. 28.

Height two and a half times in the length of the body without the tail. Diameter of orbit, a little less than half the length of the head. Edge of orbit and double edge of præoperculum punctured, and showing under the lens minute serrations. The third and fourth spines of the dorsal fin are of nearly equal length, and are longer than the others. The fifth and sixth rays of the soft dorsal, and the fourth, fifth, and sixth of the anal fins are longest. Scales large and ciliated. Tail truncate. Coloration, yellowish brown, with darker cloudings. There is a black streak from the eye to the angle of the præoperculum, and a black spot at the upper posterior corner of the orbit. There is a dark mark on the operculum, but without a white edge. All the fins are blackish, with the exception of the pectorals, which are of a pale hue.

One specimen from Darnley Island.

17.—APOGONICHTHYS MARMORATUS.

*Plate V. Fig. 2.*D. $7\frac{1}{8}$, A. $\frac{2}{5}$.

Height of the body one-third of the total length. Muzzle rather prolonged. Cleft of mouth little oblique. Lateral line continued only to the commencement of the soft dorsal fin. Tail truncate. Coloration reddish yellow, transversely marbled with brown. There is a broad yellow patch on the præoperculum, and a large blue white-edged spot on the operculum. All the fins except the pectoral are marked with several small wavy fasciæ formed of minute spots.

Two specimens, Cape Grenville.

NEW GENUS—HOMALOGRYSTES.

Body oblong. Mouth large. Lower jaw longer than the upper. A broad band of acute, recurved, somewhat conical teeth in both jaws. A band of similar teeth on the vomer and palatine bones. Two canines close together on each side of the upper jaw, in front.

Large conical teeth on the branchial arches and pharynx. Tongue smooth. Six branchiostegals. Operculum armed. Preoperculum bluntly serrated and emarginate on the posterior edge. Eye moderate. Scales small. One dorsal fin with eleven spines. Caudal fin rounded.

18.—HOMALOGRYSTES GUNTHERI.

Plate VI. Fig. 3.

D. $\frac{11}{14}$, A. $\frac{3}{9}$, P. 17, C. 18.

Height three and a half times in the total length. Head three times in the same. Upper maxillary extending to the vertical from the middle of the eye. A space half an inch wide at the symphysis of both jaws almost without teeth. Operculum of a dense bony consistence, with two flat spines and a large convexity fitting the emargination of the præoperculum. Dorsal spines strong, and tolerably uniform in size. Colour, dark on the back and light on the belly, with scattered spots all over, like those of *Oligorus Macquariensis*.

This huge fish, measuring thirty-six inches in length, twenty-six in girth, and eight in width of mouth, was caught by the hook in six or seven fathoms of water, about twelve miles south of the New Guinea coast at Katow. The sea at that distance from the shore was of a muddy appearance, and palms and other trees were floating about in abundance, indicating the presence of a large quantity of fresh water.

There can be little doubt there is a great affinity in this fish to *Grystes*. In general aspect it resembles *Oligorus*, but its dentition and the number of its branchiostegals separate it from that genus. We have named the species after the distinguished author of the "Catalogue of the Fishes of the British Museum."

19.—ODONTONECTES ERYTHROGASTES (*Renard* 1, 32, 174).

Cæcio erythrogaster, Cuv. and Val. 6, p. 442, pl. 166; Bleek, Conch. Batav. Gensch. 23, Macniel, p. 9.

Two specimens of this handsome fish were taken at Fitzroy Island.

FAMILY PRISTIPOMATIDÆ.

20.—THERAPON THERAPS.

Cuv. and Val. 3, p. 129, pl. 53; Bleek. Perc. p. 50; Rich. Ann. and mag. Nat. Hist., 1842, vol. 9, p. 126; Rüpp, Neue, Wirb. Fische, p. 95.

Found abundantly from Palm Islands to Flinders' Island.

21.—THERAPON SERVUS.

Sciæna jarbua, Forsk. descr. Anim., p. 50; Shaw, Zool. 4, p. 541.

Holocentrus servus, Bloch, t. 238, f. 1.

„ *jarbua*, Lacep., pp. 348-355.

Grammistes servus, Bl. Schn., p. 185.

Therapon Timoriensis, Quoy and Gaim., Voy. Freyc, Poiss., p. 341.

Therapon servus, Cuv. and Val. 3, p. 125, and 7, p. 479; Bleeker Perc., p. 50; Rich. Ann. and Mag. Nat. Hist., 1842, vol. 9, p. 126; Rüpp. N. Wirb. Fische, p. 95.

Pterapon trivittatus, Gray, Ind. Zool, pl. —

Specimens were got at Cape York, and in Hall Sound, New Guinea.

22.—THERAPON CAUDOVITTATUS.

Datnia caudovittata, Rich. Voy. Ereb. and Terr., Fishes, p. 24, pl. 18, f. 3-5.

Found abundantly about Long Island in Torres Straits.

23.—PRISTIPOMA HASTA.

Lutjanus hasta, Bloch, t. 246, f. 1, Lacep. 4, p. 229.

Labrus commersonii, Lacep. 3, pp. 431-447, pl. 23, f. 1.

Lutjanus microstoma, Lacep. 3, pl. 34, f. 2.

Pristipoma kakaan, Cuv. and Val. 2, p. 244, &c.

„ *hasta*, Cuv. and Val. 5, p. 247, &c.

„ *commersonii*, Cuv. and Val. 5, p. 252, &c.

„ *chrysobalioa*, Cuv. and Val. 5, p. 248.

One specimen of this beautiful fish was taken in Hall Sound, New Guinea.

24.—DIAGRAMMA CRASSILABRE.

*Plate V. Fig. 5.*D. $\frac{14}{8}$, A. $\frac{3}{7}$, P. 17, L. lat., about 60.

Height two and a half times in the total length. Length of head three and one-third times in the same. Profile convex. Eye large, and of a deep yellow. Space between the eyes more than the diameter of the orbit. Mouth small. Lips very fleshy. Posterior limb of præoperculum straight and deeply serrated. Operculum with two rather blunt points. Scales small, ctenoid. Dorsal fin deeply notched, the spinous portion partially received into a groove on the back, the spines strong—the fourth longest, the thirteenth and fourteenth short and equal. The middle rays of the soft dorsal longest, giving a rounded appearance to the fin posteriorly. Anal fin similarly shaped, but small, the second spine long and very strong. Both soft dorsal and anal fins scaly at the base. Pectorals small, not reaching to the extremity of the ventrals. caudal fin truncate. Colour entirely of a dark silvery grey, getting lighter on the belly, with the fins, front of the head before the eyes, and all parts not clothed with scales, of a blackish hue.

This fish seems to be very distinct from anything hitherto described, unless it may be the *Pristipoma nigrum* of Cuv. and Val. 5, p. 258, which is so imperfectly described as to be unrecognizable.

Two specimens, twelve inches and twenty inches long respectively, were taken at Hall Sound, New Guinea.

25.—SCOLOPSIS MARGARITIFER.

Cuv. and Val. 5, p. 337; Bleek., Verh. Batav. Genootsch. 23, Sciæn., p. 30.

One specimen, about ten inches long, was taken at Cape Grenville.

26.—SYNAGRIS FURCOSUS.

Dentex furcosus, Cuv. and Val. 6, p. 244.

This species was found everywhere along the coast from the Palm Islands to Cape Grenville.

27.—*SYNAGRIS TENIOPTERUS*.

Dentex teniopterus, Cuv. and Val. 6, p. 246; Bleek. Verh. Batav. Gen. 23, p. 11.

Two specimens were caught off Cape Sidmouth.

28.—*PENTAPUS PARADISEUS*.

Gunth. Catal. 1, p. 383.

This beautiful fish was only seen at one place off Cape Sidmouth, but there it seemed to be abundant, and to take the hook readily. Several specimens were captured.

29.—*GERRES ABBREVIATUS*.

Bleek. Jav. 1, p. 163, and Verh. Bat. Gen. 23, p. 11.

Two specimens, Cape Grenville.

30.—*GERRES CHEVERTI*.

Plate VII. Fig. 1.

D. $\frac{9}{10}$, A. $\frac{3}{7}$, L. lat. 40.

Height of body two-thirds of total length. Head, one-fourth of the same. Diameter of orbit, one-third of the length of the head. Body very compressed, forming an angle at its greatest elevation at the commencement of the dorsal fin, and sloping from thence steeply to the muzzle. The second dorsal spine is equal to half the height of the body. The second and third anal spines are about equal in length, the second being stoutest. Colour bright silvery, ventral and anal fins deep yellow, dorsal pale and tipped with black.

The only specimen in the collection of this very handsome species is marked as coming from Cape Grenville.

The length is four inches.

31.—*GERRES LONGICAUDUS*.

Plate VII. Fig. 2.

D. $\frac{9}{10}$, A. $\frac{3}{7}$, L. lat. 50.

Height of body three times in the total length. Length of head four times in the same. The second dorsal spine is half the height

of the body. Summit of back rounded. Scales rather small. Scaly sheath of the fins small. The second and third anal spines equal. Colour moderately silvery. Fins pale—the caudal long, forked, and tipped with black; the dorsal blackish on the upper half.

Numerous about Cape Grenville. The average length of the specimens caught was about five inches.

32.—*GERRES CARINATUS*.

Plate VII. Fig. 4.

D. $\frac{9}{10}$, A. $\frac{3}{7}$, L. lat. about 35.

Height of body nearly four times in the total length. Head as long as the height of the body. The second dorsal spine slight, and more than half the height of the body. There is a straight median line below the lateral line, which is carinated near the operculum, and depressed towards the tail. The head is much foveated, and has a ridge on the summit extending from the intermaxillary groove to the commencement of the dorsal fin. The præoperculum has a double edge, the inner one slightly serrated. Colour, bright silvery, with numerous black spots irregularly disposed over the back and sides. Fins pale, the dorsal lightly tipped with black; the tail is long and forked, with a brownish mark at the base.

This very peculiar and well marked species comes from Darnley Island.

Two specimens were got, each about three inches long.

33.—*GERRES BISPINOSUS*.

Plate VII. Fig. 3.

D. $\frac{9}{10}$, A. $\frac{2}{8}$, L. lat. about 37.

Height of body three and a third times in the total length. The third dorsal spine slightly longer than the second and half the height of the body. A line below the lateral line from the upper part of the operculum to the tail, keeled on its anterior half and depressed on its posterior. Colour silvery, slightly reddish above the lateral line. Fins, pale yellow—the dorsal slightly tipped with black, the caudal widely forked, and reddish yellow at its base.

Two specimens from Hall Sound, New Guinea.



The absence of the third anal spine is peculiar. The fish is also more elongate than is usual in the genus.

The specimens are three inches long.

NEW GENUS—GERREOMORPHA,

Characters of *Gerres*, but with ten dorsal spines.

34.—GERREOMORPHA ROSTRATA, .

Plate VIII. Fig. 3.

D. $\frac{10}{9}$, A. $\frac{3}{5}$, L. lat. about 45.

Height of body one-third of the total length, of which the caudal fin forms one-fourth. Head one-fourth the total length. Diameter of orbit one-fourth the length of the head. First dorsal spine very short, the second strong—its length two and a half times in height of the body. Scaly sheath of the fins large, middle rays of pectoral fins elongate, reaching as far as the commencement of the anal. Snout appearing prominent, owing to the head being much hollowed out above and below. Colour brilliant silvery. Tips of dorsal and caudal fins black.

Only one specimen of this splendid fish was taken, and unfortunately the exact locality of its capture was not noted, but it was somewhere in Torres Straits. It is a very distinct and well marked species. We have been compelled to establish a new genus for it, for the single reason that the dorsal fin has ten spines, while one of the generic characters assigned to *Gerres* is that the dorsal fin has only nine spines.

The specimen is fourteen inches in length.

FAMILY MULLIDÆ.

35.—UPENEUS MALABARICUS.

Cuv. and Val. 3, p. 467.

Two specimens from Cape Grenville, from eleven to twelve inches long.

We make the dorsal formula to be $7\frac{1}{3}$, not $\frac{8}{3}$ as given by Cuvier and Valenciennes.

FAMILY SPARIDÆ.

36.—PACHYMETOPON SQUAMOSUM.

Plate IX. Fig. 1.

Form oval. Height of body at the extremity of the ventral fin two and a half times in the total length. Head, nearly five times in the same. Mouth small. Intermaxillary large, rounded above, and without scales. Upper maxillary reaching to the vertical from the posterior nostril, which is elongate. A convex transverse protuberance extends between the eyes, and in front of that the head is without scales. The eyes are rather large, of a yellow colour, and very distant. The præoperculum is entirely covered with scales, and is very slightly serrated on the angle, which is broadly rounded. Scales on lateral line, 58. Scales on body moderate. Pectoral, caudal, anal, and soft dorsal fins completely covered with minute scales. The pectorals are short, not reaching to the middle of the ventrals. The caudal is broadly bilobed. The soft dorsal and anal fins are elevated, and vertical behind. Dorsal spines 11, short, received into a dorsal groove. Anal spines, 3, the third as much longer than the second as the second is longer than the first. Colour greenish olive, paler towards the belly, each scale with a light pearly centre, giving an appearance of many longitudinal lines.

Pachymetopon grande, the fish for which this genus was formed, is described by Gunther Cat. Brit. Mus. Fishes, vol. 1, p. 24, with great care, though from an old specimen and without a habitat. The present species from Hall Sound, New Guinea, is evidently very distinct. The fins are more completely covered with scales, so is the præoperculum; the soft dorsal and anal fins are differently shaped; the pectoral fin is short, instead of elongate, and the coloration and form of the fish is different.

The specimen, which was speared by the natives, is about fourteen inches long, over five inches in height at the highest part—the vent, and is of considerable thickness.

37.—LETHRINUS NEMATACANTHUS.

Bleek. Japan, p. 403, and Verh. Batav. Genootsch. 26, p. 91, tab. 6.

Numerous along the coast at Cape Grenville and the Pipon Islands.

38.—*LETHRINUS CHRYSOSTOMUS*.

Rich. Voy. Ereb. and Terr., Ichthyol. p. 118, pl. 60, f. 6-7.

Found abundantly from the Percy Islands to Cape York.

39.—*LETHRINUS LATICAUDIS*.

Plate VIII. Fig. 2.

Height of body two and a half times in the total length. Head four times in the same. Diameter of orbit much less than the distance between the eyes. Muzzle distant from the eye much more than two diameters of the orbit. Teeth rather small. Scales on the lateral line 47. Pectoral fin elongate. Caudal emarginate, wide-spread. Colour greenish olive, paler beneath, with an almost obsolete dark mark beneath the lateral line near the pectoral fin, and several very indistinct brown bands from the back to the belly, becoming more conspicuous towards the tail. The ventral, anal and dorsal fins brownish; the soft dorsal spotted.

One specimen was caught at the Percy Islands.

It is of an unusually deep compressed form, being four inches two lines in height to a total length of ten inches four lines.

40.—*LETHRINUS PAPUENSIS*.

Plate VIII. Fig. 1.

Height of body three and one-third times in the total length. head four times in the same. Diameter of orbit nearly one-third of the length of the head, and rather less than the space between the eyes. Snout rather narrow. Molar teeth distinct. Scales on lateral line, 48. Spines of dorsal fin feeble. Caudal fin emarginate. Colour dark olive on the back, becoming yellowish towards the belly, with a large obscure black spot below the lateral line, about the middle of the body.

One specimen of this very distinct species was got at Hall Sound, New Guinea. It seems to have most resemblance to *Lethrinus Banhamensis*, Gunth. Jour. Mus. Godeff., Heft. 7, pl. 47.

FAMILY SQUAMIPINNES.

41.—HOLOCANTHUS SEXSTRIATUS.

Cuv. and Val. 7, p. 194; Bleek. Verh. Batav. Genootsch. 23, p. 25.

Chaetodon vorticosus, Gronov. Syst. p. 74.

Several large specimens were taken near Cape Grenville.

42.—SCATOPHAGUS MULTIFASCIATUS.

Rich. Voy. Ereb. and Terr., Fishes, p. 57, pl. 35, f. 46.

Common at Cape York and Hall Sound.

43.—DREPANE PUNCTATA.

Chaetodon punctatus, L. Gm., p. 1243, &c.

„ *longimanus*, Bl. Schn., p. 231.

„ *fulcatus*, Lacep. 4, pp. 452-470, &c.

Ephippus punctatus longimanus, Cuv. Reg. Anims.

Drepane punctata, Cuv. and Val. 7, p. 132, pl. 179, &c.

„ *longimana*, Cuv. and Val. 7, p. 133, &c.

Harpochirus punctatus and *longimanus*, Cant. Catal. pp. 162-163.

Cape York, very abundant.

44.—SCORPIS VINOSA.

Plate IX. Fig. 2.

Height two and a half times in the total length. Snout small, rounded, convex, without scales, and with numerous punctures. Head naked on the forehead up to the eyes, and punctured. Space between the eyes wide and convex. Outer teeth in a single row, compressed and pointed. Upper maxillary scaly, extending nearly to a line with the middle of the eye. Præoperculum minutely serrated. Operculum emarginate below the angle. Scales small, those on the fins very small. Dorsal fin with ten spines, anal with three of nearly equal length; Soft dorsal and anal fins equal, rounded and nearly vertical behind, and so covered with scales as to make the number of the rays invisible. Caudal fin bilobed. Colour of an uniform opaque claret hue.

One specimen, 4 inches long, was taken at Darnley Island.

FAMILY TRIGLIDÆ.

45.—SCORPENA BYNOENSIS.

Rich. Voy. Ereb. and Terr., Fishes, p. 22, pl. 14, f. 3-4.
Two specimens, Darnley Island.

46.—PTEROIS VOLITANS.

Seba, 3.28.1; Renard, Poiss., 1.6.41-143.215, &c.
Gasterosteus volitans, L. 1, p. 491.
Scorpena volitans, L. Gm. 1 p. 119; Block., t. 184, &c.
Scorpena mahe, Lacep. 3, p. 278.
Pterois volitans, Cuv. and Val. 4, p. 352, pl. 88; Bleek. Verh. Batav. Genoostch, 22, p. 8; Rüpp, N. W. Fische, p. 107.
One specimen, Hall Sound.

47.—TETRAROGE DARNLEYENSIS.

Plate VI. Fig. 1.

D. $\frac{13}{8}$, A. $\frac{3}{6}$.

Body compressed, oblong, without scales. Head large. Cleft of mouth oblique. Upper maxillary reaching to the vertical from the posterior third of the eye. Space between the eyes narrow and deeply grooved with two fine, partially converging ridges. Præorbital armed, with one of the spines, long, acute, and directed backwards. Præoperculum armed with several strong spines, the upper one long and acute; both operculum and præoperculum strongly keeled. Dorsal fin commencing above the eye. Pectorals large, spreading and reaching beyond the origin of the anal fin. Colour in spirits, yellowish, mixed and mottled with black.

One specimen from Darnley Island found in coral.

48.—PLATYCEPHALUS INSIDIATOR.

Cottus insidiator, Forsk., p. 25; L. Gm. 1, p. 1213; Shaw, Zool., &c.

Callionymus indicus, L. Gm. 1, p. 1153.

Cottus spatulae, Bl. taf. 424.

Platycephalus insidiator, Bl. Schn., p. 59; Cuv. and Val. 4, p. 227; Rüpp, N. W. Fische, p. 102; Bleek. Verh. Batav. Gen. 22, p. 6;

Faun. Japon. Poiss., p. 39, pl. 15, f. 1; Cant. Catal. p. 37; Bl. Schn., p. 59, *P. spatula*.

Batrachus indicus, Bl. Schn., p. 43.

Calliomorus indicus, Lacep. 2, p. 343.

Cottus Madagascariensis, Lacep. 3, p. 48. t. 11. f. 1-2; Shaw Zool. 4, p. 261, pl. 37; Russell, pl. 46.

Calliomorus chacca, Buch. Ham. pp. 133-373.

Platycephalus endrachtensis, Quoy and Gaim., Voy. Freyc. Zool., p. 353; Cuv. and Val. 4, p. 240.

Platycephalus chacca, Gray, Zool. Ind. 2, pl. f. 2.

Taken at Capes Grenville and York.

49.—PLATYCEPHALUS ISACANTHUS.

Cuv. and Val. 4, p. 246; Cuv. Regn. Anim. Ill. Poiss. pl. 22, f. 3; Less. Voy. Coq., p. 214.

Single specimens were taken at the Palm Islands and Cape Grenville.

FAMILY TRACHINIDÆ.

50.—SILLAGO CILIATA.

Cuv. and Val. 3, p. 415; Cuv. Regn. Anim. pl. 13, f. 2.

Abundant at Cape York. Found also at the Percy Islands.

51.—SILLAGO MACULATA.

Quoy and Gaim., Voy. Freyc. Zool. p. 261, pl. 53, f. 2; Cuv. and Val. 3, p. 411; Bleek. Perc., p. 62, &c. &c.

One specimen was taken at No. 4 Island, Howick Group.

52.—SILLAGO GRACILIS.

Plate VI. Fig. 2.

D. $11\frac{1}{2}$, A. $\frac{1}{2}$.

Height of body six and a half times in the total length. Head about four times in the same. Colour brilliant yellowish red, with a lateral silvery band, and three rows of distant black spots—one on the silvery band, one between that and the back, and one on the summit of the back. Fins pale, unspotted. Caudal truncate.

Two specimens were taken either at Darnley Island or Hall Sound, most probably the latter.

They are both about the same length, three inches.

53.—*OPISTHOGNATHUS MACULATUS.**Plate IX. Fig. 3.*

D. 25, A. 16.

Height of body nearly six times in the total length. Head three and one-third times in the same. Space between the eyes less than one-fourth of the diameter of the orbit. The upper maxillary reaches nearly to the angle of the præoperculum. The lateral line takes its rise above the operculum, and extends near and parallel to the dorsal fin to within an inch of the tail. Colour brownish red above, paler beneath, and marked all over with scattered black or deep brown spots—those on the head and pectoral fins small, those on the body and dorsal fin of various sizes. Anal fin with three spots and a black margin; caudal fin rounded. The ventral fins are ill-developed, and somewhat blenniform.

One specimen, seven inches long, of this curious fish was got at Palm Island.

FAMILY SPHYRÆNIDÆ.

54.—*SPHYRÆNA FORSTERI.*

Cuv. and Val. 3, p. 353, and 7, p. 509; Bleek. Jav. 2, p. 424, and Sphyr. p. 13.

One specimen, thirteen inches long, from Hall Sound, New Guinea.

EXPLANATION OF PLATES.

Plate III.

Pseudolates cavifrons, $\frac{1}{4}$ nat. size.

Plate IV.

1. *Genyoroge unicolor*, $\frac{1}{3}$ nat. size.
2. *Serranus alatus*, $\frac{1}{3}$ nat. size.
3. *Serranus carinatus*, $\frac{1}{2}$ nat. size.

Plate V.

1. *Apogon guttulatus*, nat. size.
2. *Apogonichthys marmoratus*, nat. size.
3. „ *Darnleyensis*, nat. size.
4. *Ambassis Papuensis*, nat. size.
5. *Diagrammu crassilabre*, $\frac{1}{4}$ nat. size.

Plate VI.

1. *Tetraroge Darnleyensis*, nat. size.
2. *Sillago gracilis*, nat. size.
3. *Homalogrystes Guntheri*, $\frac{1}{6}$ nat. size.

Plate VII.

1. *Gerres Cheverti*, nat. size.
2. „ *longicaudis*, $\frac{4}{5}$ nat. size.
3. „ *bispinosus*, nat. size.
4. „ *curinatus*, nat. size.

Plate VIII.

1. *Lethrinus Papuensis*, $\frac{1}{2}$ nat. size.
2. „ *laticaudis*, $\frac{1}{3}$ nat. size.
3. *Gerreomorpha rostrata* $\frac{2}{4}$ in nat. size.

Plate IX.

1. *Pachymetopon squamosum*, about $\frac{1}{3}$ nat. size.
2. *Scorpiis vinosa*, nearly nat. size.
3. *Opisthognathus maculatus*, over $\frac{1}{2}$ nat. size.

Note on *Poëphila Gouldiæ*, by E. PIERSON RAMSAY, F.L.S.,
Curator of the Australian Museum.

Since my last remarks on this species I have received a letter from my friend, Mr. Armit, of Queensland, who informs me that the male of the bird I exhibited at our last meeting *had a red head and a long pointed tail*. Mr. Armit also informed me that they